## **THE CLAIMS:**

1 (previously presented). A transmitter comprising:

an oscillator enclosed in a metal shield;

a Phase Lock Loop (PLL) coupled to the oscillator;

a serializer coupled to receive a clock signal from the PLL and to provide serial data; and

an electrical-to-optical converter coupled to the serializer to convert the serial data to optical signals, wherein the metal shield is soldered to a ground ring on a printed circuit board, wherein the metal shield comprises:

one or more positioning protrusions perpendicular to the printed circuit board that enter into holes in the printed circuit board; and

one or more attachment protrusions parallel to the printed circuit board for soldering the metal shield to the ground ring.

2 (cancelled).

3 (original). The transmitter of claim 1, wherein the ground ring is electrically coupled to one or more ground planes of the printed circuit board.

4 (previously presented). The transmitter of claim 1, wherein the metal shield is comprised at least partially of copper.

5-6 (cancelled).

7 (previously presented). The transmitter of claim 1, wherein the oscillator is a voltage-controlled oscillator.

8-20 (cancelled).